

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Beatty *et al.*

Appl. No.: 09/589,387

Filed: June 7, 2000

For: **Method for Mapping Potential
Distribution of a Heart Chamber**

Confirmation No.: 8432

Art Unit: 3739

Examiner: Lee S. Cohen

Atty. Docket: 2384.002000I

Information Disclosure Statement under 37 C.F.R. § 1.97(b) (Part I)

Mail Stop Amendment

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Listed on accompanying IDS Forms are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Applicants have listed publication dates on the attached IDS Forms based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b) before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No statement or fee is required.

Copies of documents **NPL1-NPL30** are submitted. However, in accordance with 37 C.F.R. § 1.98(a)(2), no copies of U.S. patents and patent application publications cited on the attached IDS Forms are submitted.

It is expected that the examiner will review the prosecution and cited art in the parent application no. 08/387,832 in accordance with MPEP 2001.06(b), and indicate in the next communication from the office that the art cited in the earlier prosecution history has been reviewed in connection with the present application.

It is respectfully requested that the Examiner initial and return a copy of the enclosed IDS Forms, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



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Attorney for Applicants
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Date: 5/15/07

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Atty. Dkt. No. 2384.002000I

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| Substitute for form 1449/PTO | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (PART I) <i>(Use as many sheets as necessary)</i> | | Application Number | 09/589,387 |
| | | Filing Date | June 7, 2000 |
| | | First Name Inventor | Graydon Ernest Beatty |
| | | Art Unit | 3739 |
| | | Examiner Name | Lee S. Cohen |
| Sheet | 1 | of | 5 |
| | | Attorney Docket Number | 2384.0020001 |

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| | FP1 | | | | |
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| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (PART I) <i>(Use as many sheets as necessary)</i> | | Application Number | 09/589,387 |
| | | Filing Date | June 7, 2000 |
| | | First Named Inventor | Graydon Ernest Beatty |
| | | Art Unit | 3739 |
| | | Examiner Name | Lee S. Cohen |
| | | Attorney Docket Number | 2384.002000I |
| Sheet | 1 | of | 3 |

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| | NPL1 | Arisi, G., et al., "Localization Of Ectopic Ventricular Focuses By Means Of A Diameter Multielectrode Catheter," <i>Advances in Electrophysiology</i> , Elsevier Science Publishers B.V. (Biomedical Division), Z. Antaloczy et al., editors, pp. 67-70 (1990). | |
| | NPL2 | Branham B., et al., "A System For Accurate Interactive 3-D Display Of Cardiac Electrical Activity," <i>Computers in Cardiology</i> , IEEE Computer Society Press 0276-6547/92, pp. 335-338 (Oct. 11-14, 1992). | |
| | NPL3 | Breyer, B. and CIKES, I., "Ultrasonically Marked Catheter - A Method For Positive Echographic Catheter Position Identification," <i>Med. & Biol. Eng. & Comput.</i> , 22:268-271 (May 1984). | |
| | NPL4 | Buckles, D., et al., "Computer-Enhanced Mapping Of Activation Sequences In The Surgical Treatment Of Supraventricular Arrhythmias," <i>PACE</i> , Vol. 13, Part I, pp. 1401-1407 (November 1990). | |
| | NPL5 | Cikes, I., et al., "Cardiac Catheterisation Guided By Ultrasound," <i>Journal of the American College of Cardiology</i> , Vol. 3, No. 2, p. 564 (February 1984). | |
| | NPL6 | Cikes, I. and BREYER, B., "Complete Cardiac Catheterisation Guided By Ultrasound," <i>European Heart Journal</i> , vol. 4 (suppl. E), p. 21 (1983). | |
| | NPL7 | Cikes, I., "Interventional Echocardiography," <i>5th Symposium on Echocardiography</i> , Rotterdam, Abstracts p. 38 (1983). | |
| | NPL8 | Cikes, I., et al., "Interventional Echocardiography," <i>Interventional Ultrasound</i> , 1st edition, chapter 25, Munksgaard, Copenhagen, pp. 160-168 (1985). | |
| | NPL9 | Cox, J., et al., "Surgery For Atrial Fibrillation," <i>Cardiac Surgery: State of the Art Reviews</i> , Vol. 4, No. 1, pp. 207-217 (1990). | |
| | NPL10 | De Bakker, J., et al., "Endocardial Mapping By Simultaneous Recording Of Endocardial Electrograms During Cardiac Surgery For Ventricular Aneurysm," <i>Journal of American College of Cardiology</i> , Vol. 2, No. 5, pp. 947-53 (Nov. 1983). | |
| Examiner Signature | Date Considered | | |

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| | | Art Unit | 3739 |
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| | NPL11 | Derfus, D. and PILKINGTON, T., "Assessing The Effect Of Uncertainty In Intracavitary Electrode Position On Endocardial Potential Estimates," <i>IEEE Transactions on Biomedical Engineering</i> , Vol. 39, No. 7, pp. 676-681 (July 1992). | |
| | NPL12 | Derfus, D., et al., "Calculating Intracavitary Potentials from Measured Endocardial Potentials," <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , Vol. 12, No. 2, p. 635 (1990). | |
| | NPL13 | Derfus, D., et al., "A Comparison of Measured and Calculated Intracavitary Potentials for Electrical Stimuli in the Exposed Dog Heart," <i>IEEE Transactions on Biomedical Engineering</i> , Vol. 39, No. 11, pp. 1192-1206 (Nov. 1992). | |
| | NPL14 | Derfus, D. and PILKINGTON, T., "Effect Of Intracavitary Electrode Position On Endocardial Potential Estimates," <i>IEEE Engineering in Medicine & Biology Society 10th Annual International Conference</i> , pp. 185-186 (1988). | |
| | NPL15 | Desai, J., et al., "Orthogonal Electrode Catheter Array for Mapping of Endocardial Focal Site of Ventricular Activation," <i>PACE</i> , Vol. 14, Part I, pp. 557-574 (April 1991). | |
| | NPL16 | Downar, E., et al., "Endocardial Mapping of Ventricular Tachycardia in the Intact Human Ventricle: Evidence for Reentrant Mechanisms," <i>Journal of the American College of Cardiology</i> , Vol. 11, No. 4, pp. 783-91 (April 1988). | |
| | NPL17 | Durrer, D. and VAN DER TWEEL, L., "Spread of Activation in the Left Ventricular Wall of the Dog. II: Activation Conditions at the Epicardial Surface," <i>American Heart Journal</i> , pp. 192-203 (Aug. 1953). | |
| | NPL18 | Fann, J., et al., "Endocardial Activation Mapping and Endocardial Pace-Mapping Using a Balloon Apparatus," <i>Am. J. Cardiol.</i> , Vol. 55, pp. 1076-1083 (1985). | |
| | NPL19 | Fenici, R. and MELILLO, G., "Biomagnetically Localizable Multipurpose Catheter And Method For MCG Guided Intracardiac Electrophysiology, Biopsy And Ablation Of Cardiac Arrhythmias," <i>International Journal of Cardiac Imaging</i> , vol. 7, pp. 207-215 (1991). | |
| | NPL20 | Fenici, R., et al., "Catheter Ablation Of Cardiac Arrhythmias: Magnetocardiographic Localization Of Electrocatheters And Arrhythmogenic Foci," <i>8th International Congress "The New Frontiers of Arrhythmias,"</i> Marilleva, Italy, pp. 723-731 (Jan. 31-Feb. 6, 1988). | |
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| | NPL21 | Fenici, R., <i>et al.</i> , "Clinical Magnetocardiography: 10 Years Experience At The Catholic University," <i>International Journal of Cardiac Imaging</i> , Vol. 7, pp. 151-167 (1991). | | |
| | NPL22 | Fenici, R. and MELILLO, G., "Magnetocardiography: Ventricular Arrhythmias," <i>European Heart Journal</i> , vol. 14 (Suppl. E), pp. 53-60 (1993). | | |
| | NPL23 | Harada, A., <i>et al.</i> , "Potential Distribution Mapping: New Method For Precise Localization Of Intramural Septal Origin Of Ventricular Tachycardia," <i>Circulation</i> , Vol. 78 (Suppl. III), No. 5, pp. III-137-III-147 (Nov. 1988). | | |
| | NPL24 | Hauer, R., <i>et al.</i> , "Endocardial Catheter Mapping: Validation Of A Cineradiographic Method For Accurate Localization Of Left Ventricular Sites," <i>Circulation</i> , Vol. 74, No. 4, pp. 862-868 (October 1986). | | |
| | NPL25 | Hauer, R., <i>et al.</i> , "Endocardial Catheter Mapping: Wire Skeleton Technique For Representation Of Computed Arrhythmogenic Sites Compared With Intraoperative Mapping," <i>Circulation</i> , Vol. 74, No. 6, pp. 1346-1354 (Dec. 1986). | | |
| | NPL26 | Ideker, R., <i>et al.</i> , "A Computerized Method For The Rapid Display Of Ventricular Activation During The Intraoperative Study Of Arrhythmias," <i>Circulation</i> , Vol. 59, No. 3, pp. 449-458 (March 1979). | | |
| | NPL27 | Ideker, R., <i>et al.</i> , "Simultaneous Multichannel Cardiac Mapping Systems," <i>PACE</i> , Vol. 10, pp. 281-292 (March-April 1987). | | |
| | NPL28 | Ideker, R., "A Study To Evaluate The Ability Of A Multielectrode Intracavitary Probe To Determine The Site Of Origin Of Ventricular Tachycardia," <i>Basic Arrhythmia Laboratory, Engineering Research Center in Emerging Cardiovascular Technologies</i> , Duke University, pp. 1-3. | | |
| | NPL29 | Jackman, W., <i>et al.</i> , "New Catheter Technique For Recording Left Free-Wall Accessory Atrioventricular Pathway Activation: Identification Of Pathway Fiber Orientation," <i>Circulation</i> , Vol. 78, No. 3, pp. 598-611 (Sep. 1988). | | |
| | NPL30 | Josephson, M., <i>Clinical Cardiac Electrophysiology: Techniques and Interpretations</i> , 2nd ed., pp. 566-580, 608-615, and 770-783 (1993). | | |

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